



#3

SEQUENCE LISTING

<110> Vandenbark, Arthur A.

<120> Methods of Identifying and Monitoring
Disease-Associated T Cells

<130> P-IM 4734

<140> 09/853,830

<141> 2001-05-10

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1 5 10 15

Pro Leu Val Lys Gly

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Tyr Pro Asn Gln Gly Leu Gln Leu Leu Leu Lys Tyr Thr Ser Ala Ala

1 5 10 15

Thr Leu Val Lys Gly

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Tyr Pro Asn Gln Gly Leu Gln Leu Leu Leu Lys Tyr Thr Thr Gly Ala

1 5 10 15

Thr Leu Val Lys Gly

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Thr Leu Val Lys Gly
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Tyr Pro Asn Gln Gly Leu Gln Leu Leu Leu Lys Tyr Leu Ser Gly Ser
1 5 10 15
Thr Leu Val Glu Ser
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1 5 10 15
Thr Leu Val Lys Gly
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Ser Pro Gly Gln Gly Leu Gln Leu Leu Leu Lys Tyr Phe Ser Gly Asp
1 5 10 15
Thr Leu Val Gln Gly
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1 5 10 15
Asn Glu Asp Gly Arg
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Asn Ser Gly Arg Gly Leu Val His Leu Ile Leu Ile Arg Ser Asn Glu
1 5 10 15
Arg Glu Lys His Ser
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Leu Pro Ser Gln Gly Pro Glu Tyr Val Ile His Gly Leu Thr Ser Asn
1 5 10 15
Val Asn Asn Arg Met
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Ile His Ser Gln Gly Pro Gln Tyr Ile Ile His Gly Leu Lys Asn Asn
1 5 10 15
Glu Thr Asn Glu Met
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<400> 17

Ile	His	Ser	Gln	Gly	Pro	Gln	Asn	Ile	Ile	His	Gly	Leu	Lys	Asn	Asn
1				5				10						15	
Glu	Thr	Asn	Glu	Met											
				20											

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<400> 18

Asp	Pro	Gly	Arg	Gly	Pro	Val	Phe	Leu	Leu	Leu	Ile	Arg	Glu	Asn	Glu
1				5				10						15	
Lys	Glu	Lys	Arg	Lys											
				20											

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<400> 19

Ser	Ser	Gly	Glu	Met	Ile	Phe	Leu	Ile	Tyr	Gln	Gly	Ser	Tyr	Asp	Gln
1				5				10						15	
Gln	Asn	Ala	Thr	Glu											
				20											

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Ser	Ser	Gly	Glu	Met	Ile	Phe	Leu	Ile	Tyr	Gln	Gly	Ser	Tyr	Asp	Glu
1				5				10						15	
Gln	Asn	Ala	Thr	Glu											
				20											

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<400> 21

His Asp Gly Gly Ala Pro Thr Phe Leu Ser Tyr Asn Ala Leu Asp Gly

1 5 10 15
Leu Glu Glu Thr Gly
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His Asp Gly Gly Ala Pro Thr Phe Leu Ser Tyr Asn Gly Leu Asp Gly
1 5 10 15
Leu Glu Glu Thr Gly
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His Ala Gly Glu Ala Pro Thr Phe Leu Ser Tyr Asn Val Leu Asp Gly
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Leu Glu Glu Lys Gly
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Glu Leu Gly Lys Arg Pro Gln Leu Ile Ile Asp Ile Arg Ser Asn Val
1 5 10 15
Gly Glu Lys Lys Asp
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Glu Leu Gly Lys Gly Pro Gln Leu Ile Ile Asp Ile Arg Ser Asn Val
1 5 10 15
Gly Glu Lys Lys Asp
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Glu Ser Gly Lys Gly Pro Gln Phe Ile Ile Asp Ile Arg Ser Asn Met
1 5 10 15
Asp Lys Arg Gln Gly
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Tyr Ser Arg Gln Arg Leu Gln Leu Leu Leu Arg His Ile Ser Arg Glu
1 5 10 15
Ser Ile Lys Gly Phe
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Glu Pro Gly Glu Gly Pro Val Leu Leu Val Thr Val Val Thr Gly Gly
1 5 10 15
Glu Val Lys Lys Leu
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Phe Pro Gly Cys Ala Pro Arg Leu Leu Val Lys Gly Ser Lys Pro Ser
1 5 10 15
Gln Gln Gly Arg Tyr
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Phe Pro Gly Lys Gly Pro Ala Leu Leu Ile Ala Ile Arg Pro Asp Val
1 5 10 15
Ser Glu Lys Lys Glu
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<400> 36
Glu Thr Ala Lys Thr Pro Glu Ala Leu Phe Val Met Thr Leu Asn Gly
1 5 10 15
Asp Glu Lys Lys Lys
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<400> 37
His Pro Gly Gly Gly Ile Val Ser Leu Phe Met Leu Ser Ser Gly Lys
1 5 10 15
Lys Lys His Gly Arg
20

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<400> 38
Phe Pro Ser Gln Gly Pro Arg Phe Ile Ile Gln Gly Tyr Lys Thr Lys
1 5 10 15
Val Thr Asn Glu Val
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<213> Homo sapiens

<400> 39

Tyr	Pro	Ala	Glu	Gly	Pro	Thr	Phe	Leu	Ile	Ser	Ile	Ser	Ser	Ile	Lys
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Asp	Lys	Asn	Glu	Asp											
				20											

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<213> Homo sapiens

<400> 40

Tyr	Pro	Gly	Glu	Gly	Leu	Gln	Leu	Leu	Leu	Lys	Ala	Thr	Lys	Ala	Asp
1				5					10					15	
Asp	Lys	Gly	Ser	Asn											
				20											

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<213> Homo sapiens

<400> 41

Asp	Pro	Gly	Lys	Gly	Leu	Thr	Ser	Leu	Leu	Leu	Ile	Gln	Ser	Ser	Gln
1				5					10					15	
Arg	Glu	Gln	Thr	Ser											
				20											

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<400> 42

Asp	Thr	Gly	Arg	Gly	Pro	Val	Ser	Leu	Thr	Ile	Met	Thr	Phe	Ser	Glu
1				5					10					15	
Asn	Thr	Lys	Ser	Asn											
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<400> 43

Asp	Pro	Gly	Glu	Gly	Pro	Val	Leu	Leu	Ile	Ala	Leu	Tyr	Lys	Ala	Gly
1				5					10					15	

Glu Leu Thr Ser Asn
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<400> 44
Lys Tyr Gly Glu Gly Leu Ile Phe Leu Met Met Leu Gln Lys Gly Gly
1 5 10 15
Glu Glu Lys Ser His
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<400> 45
Asp Pro Gly Lys Ser Leu Glu Ser Leu Phe Val Leu Leu Ser Asn Gly
1 5 10 15
Ala Val Lys Gln Glu
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<400> 46
Gln Glu Lys Lys Ala Pro Thr Phe Leu Phe Met Leu Thr Ser Ser Gly
1 5 10 15
Ile Glu Lys Lys Ser
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<400> 47
Lys His Gly Glu Ala Pro Val Phe Leu Met Ile Leu Leu Lys Gly Gly
1 5 10 15
Glu Gln Met Arg Arg
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<400> 48
Lys His Gly Glu Ala Pro Val Phe Leu Met Ile Leu Leu Lys Gly Gly
1 5 10 15
Glu Gln Lys Gly His
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<400> 49
Asp Pro Gly Lys Gly Pro Glu Phe Leu Phe Thr Leu Tyr Ser Ala Gly
1 5 10 15
Glu Glu Lys Glu Lys
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<400> 50
Tyr Pro Ser Lys Pro Leu Gln Leu Leu Gln Arg Glu Thr Met Glu Asn
1 5 10 15
Ser Lys Asn Phe Gly
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Arg Pro Gly Gly His Pro Val Phe Leu Ile Gln Leu Val Lys Ser Gly
1 5 10 15
Glu Val Lys Lys Gln
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Ser Leu Asp Gln Gly Leu Gln Phe Leu Ile Gln Tyr Tyr Asn Gly Glu
1 5 10 15
Glu Arg Ala Lys Gly
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Ser Leu Asp Gln Gly Leu Gln Phe Leu Ile His Tyr Tyr Asn Gly Glu
1 5 10 15
Glu Arg Ala Lys Gly
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Phe Pro Lys Gln Ser Leu Met Leu Met Ala Thr Ser Asn Glu Gly Ser
1 5 10 15
Lys Ala Thr Tyr Glu
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<400> 55
Phe Pro Lys Lys Ser Leu Met Leu Met Ala Thr Ser Asn Glu Gly Ser
1 5 10 15
Lys Ala Thr Tyr Glu
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Phe Pro Lys Gln Ser Leu Met Leu Met Ala Thr Ser Asn Glu Gly Cys
1 5 10 15
Lys Ala Thr Tyr Glu
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Phe Pro Lys Lys Ser Leu Met Gln Ile Ala Thr Ser Asn Glu Gly Ser
1 5 10 15
Lys Ala Thr Tyr Glu
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<400> 58
Asp Pro Gly Leu Gly Leu Arg Leu Ile Tyr Phe Ser Tyr Asp Val Lys
1 5 10 15
Met Lys Glu Lys Gly
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Gln Pro Gly Gln Ser Leu Thr Leu Ile Ala Thr Ala Asn Gln Gly Ser
1 5 10 15
Glu Ala Thr Tyr Glu
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Thr Pro Gly Gln Gly Leu Gln Phe Leu Phe Glu Tyr Phe Ser Glu Thr
1 5 10 15
Gln Arg Asn Lys Gly
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Thr Leu Gly Gln Gly Leu Gln Phe Leu Phe Glu Tyr Phe Ser Glu Thr
1 5 10 15
Gln Arg Asn Lys Gly
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<400> 62

Ala Leu Gly Gln Gly Pro Gln Phe Ile Phe Gln Tyr Tyr Glu Glu Glu
1 5 10 15
Glu Arg Gln Arg Gly
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<400> 63

Val Leu Gly Gln Gly Pro Gln Phe Ile Phe Gln Tyr Tyr Glu Lys Glu
1 5 10 15
Glu Arg Gly Arg Gly
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<400> 64

Ala Leu Gly Leu Gly Leu Gln Leu Leu Trp Tyr Asp Glu Gly Glu
1 5 10 15
Glu Arg Asn Arg Gly
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<400> 65

Ala Leu Gly Leu Gly Leu Gln Phe Leu Leu Trp Tyr Asp Glu Gly Glu
1 5 10 15
Glu Arg Asn Arg Gly

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<400> 66
Ala Leu Gly Gln Gly Pro Gln Phe Ile Phe Gln Tyr Tyr Arg Glu Glu
1 5 10 15
Glu Asn Gly Arg Gly
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Ser Leu Gly Gln Gly Pro Glu Phe Leu Ile Tyr Phe Gln Gly Thr Gly
1 5 10 15
Ala Ala Asp Asp Ser
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<400> 68
Ser Leu Gly Gln Gly Pro Glu Leu Leu Ile Tyr Phe Gln Gly Thr Gly
1 5 10 15
Ala Ala Asp Asp Ser
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<400> 69
Ala Leu Gly Gln Gly Pro Glu Phe Leu Thr Tyr Phe Gln Asn Glu Ala
1 5 10 15
Gln Leu Asp Lys Ser
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<400> 70

Ala	Leu	Gly	Gln	Gly	Pro	Glu	Phe	Leu	Thr	Tyr	Phe	Asn	Tyr	Glu	Ala
1				5					10					15	
Gln	Gln	Asp	Lys	Ser											
				20											

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<400> 71

Thr	Leu	Gly	Gln	Gly	Pro	Glu	Phe	Leu	Thr	Tyr	Phe	Gln	Asn	Glu	Ala
1				5					10					15	
Gln	Leu	Glu	Lys	Ser											
				20											

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<400> 72

Asn	Pro	Gly	Gln	Gly	Pro	Glu	Phe	Leu	Thr	Tyr	Phe	Gln	Asn	Glu	Ala
1				5					10					15	
Gln	Leu	Glu	Lys	Ser											
				20											

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<400> 73

Ser	Leu	Gly	Gln	Gly	Leu	Glu	Phe	Leu	Ile	Tyr	Phe	Gln	Gly	Asn	Ser
1				5					10					15	
Ala	Pro	Asp	Lys	Ser											
				20											

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<400> 74

Ala	Leu	Gly	Gln	Gly	Pro	Glu	Phe	Leu	Thr	Tyr	Phe	Asn	Tyr	Glu	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1 5
Gln Pro Asp Lys Ser
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10

15

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<400> 75
Thr Leu Gly Gln Gly Ser Glu Val Leu Thr Tyr Ser Gln Ser Asp Ala
1 5 10 15
Gln Arg Asp Lys Ser
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<400> 76
Lys Ala Lys Lys Pro Pro Glu Leu Met Phe Val Tyr Ser Tyr Glu Lys
1 5 10 15
Leu Ser Ile Asn Glu
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<210> 77
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<400> 77
Ser Ala Lys Lys Pro Leu Glu Leu Met Phe Val Tyr Ser Leu Glu Glu
1 5 10 15
Arg Val Glu Asn Asn
 20

<210> 78
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<400> 78
Ser Ala Lys Lys Pro Leu Glu Leu Met Phe Val Tyr Asn Phe Lys Glu
1 5 10 15
Gln Thr Glu Asn Asn
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<210> 79
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<400> 79
Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn Asn Asn Val
1 5 10 15
Pro Ile Asp Asp Ser
20

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<400> 80
Thr Met Met Gln Gly Leu Glu Leu Leu Ala Tyr Phe Arg Asn Arg Ala
1 5 10 15
Pro Leu Asp Asp Ser
20

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<400> 81
Asp Ser Lys Lys Phe Leu Lys Ile Met Phe Ser Tyr Asn Asn Lys Glu
1 5 10 15
Leu Ile Ile Asn Glu
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<210> 82
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<400> 82
Lys Leu Glu Glu Glu Leu Lys Phe Leu Val Tyr Phe Gln Asn Glu Glu
1 5 10 15
Leu Ile Gln Lys Ala
20

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<400> 83

Thr Leu Glu Glu Glu Leu Lys Phe Phe Ile Tyr Phe Gln Asn Glu Glu
1 5 10 15
Ile Ile Gln Lys Ala
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<400> 84

Asp Pro Gly Met Glu Leu His Leu Ile His Tyr Ser Tyr Gly Val Asn
1 5 10 15
Ser Thr Glu Lys Gly
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<400> 85

Asp Pro Gly His Gly Leu Arg Leu Ile His Tyr Ser Tyr Gly Val Lys
1 5 10 15
Asp Thr Asp Lys Gly
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<400> 86

Asp Leu Gly His Gly Leu Arg Leu Ile His Tyr Ser Tyr Gly Val Gln
1 5 10 15
Asp Thr Asn Lys Gly
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<400> 87

Asp Leu Gly His Gly Leu Arg Leu Ile His Tyr Ser Tyr Gly Val Lys
1 5 10 15
Asp Thr Asn Lys Gly
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Asp Leu Gly His Gly Leu Arg Leu Ile His Tyr Ser Tyr Gly Val His
1 5 10 15
Asp Thr Asn Lys Gly
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<210> 89
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<400> 89
Asp Leu Gly His Gly Leu Arg Leu Ile Tyr Tyr Ser Ala Ala Ala Asp
1 5 10 15
Ile Thr Asp Lys Gly
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<210> 90
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<400> 90
Asp Pro Gly Met Gly Leu Arg Leu Ile His Tyr Ser Val Gly Ala Gly
1 5 10 15
Ile Thr Asp Gln Gly
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<210> 91
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<213> Homo sapiens

<400> 91
Asp Pro Gly Met Gly Leu Arg Leu Ile His Tyr Ser Val Gly Glu Gly
1 5 10 15
Thr Thr Ala Lys Gly
20

<210> 92
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<213> Homo sapiens

<400> 92

Asp	Pro	Gly	Met	Gly	Leu	Arg	Leu	Ile	Tyr	Tyr	Ser	Ala	Ser	Glu	Gly
1				5					10					15	
Thr	Thr	Asp	Lys	Gly											
				20											

<210> 93

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<212> PRT

<213> Homo sapiens

<400> 93

Asp	Pro	Gly	Met	Gly	Leu	Arg	Arg	Ile	His	Tyr	Ser	Val	Ala	Ala	Gly
1				5					10					15	
Ile	Thr	Asp	Lys	Gly											
				20											

<210> 94

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<213> Homo sapiens

<400> 94

Asp	Leu	Gly	Leu	Gly	Leu	Arg	Leu	Ile	His	Tyr	Ser	Asn	Thr	Ala	Gly
1				5					10					15	
Thr	Thr	Gly	Lys	Gly											
				20											

<210> 95

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<213> Homo sapiens

<400> 95

Asp	Pro	Gly	Met	Gly	Leu	Lys	Leu	Ile	Tyr	Tyr	Ser	Val	Gly	Ala	Gly
1				5					10					15	
Ile	Thr	Asp	Lys	Gly											
				20											

<210> 96

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<212> PRT

<213> Homo sapiens

<400> 96

Asp	Pro	Gly	Met	Gly	Leu	Arg	Leu	Ile	Tyr	Tyr	Ser	Ala	Ala	Ala	Gly
1				5					10					15	

Thr Thr Asp Lys Glu
20

<210> 97
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<213> Homo sapiens

<400> 97
Asp Pro Gly Leu Gly Leu Arg Gln Ile Tyr Tyr Ser Met Asn Val Glu
1 5 10 15
Val Thr Asp Lys Gly
20

<210> 98
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<212> PRT
<213> Homo sapiens

<400> 98
Asp Pro Gly Leu Gly Leu Arg Leu Ile Tyr Tyr Ser Phe Asp Val Lys
1 5 10 15
Asp Ile Asn Lys Gly
20

<210> 99
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<400> 99
Val Met Gly Lys Glu Ile Lys Phe Leu Leu His Phe Val Lys Glu Ser
1 5 10 15
Lys Gln Asp Glu Ser
20

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<400> 100
Asp Pro Gly Gln Gly Leu Arg Leu Ile Tyr Tyr Ser Gln Ile Val Asn
1 5 10 15
Asp Phe Gln Lys Gly
20

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<400> 101
Asp Pro Gly Gln Gly Leu Arg Leu Ile Tyr Tyr Ser His Ile Val Asn
1 5 10 15
Asp Phe Gln Lys Gly
20

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<400> 102
Leu Pro Glu Glu Gly Leu Lys Phe Met Val Tyr Leu Gln Lys Glu Asn
1 5 10 15
Ile Ile Asp Glu Ser
20

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<400> 103
Asn Gln Asn Lys Glu Phe Met Leu Leu Ile Ser Phe Gln Asn Glu Gln
1 5 10 15
Val Leu Gln Glu Thr
20

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<400> 104
Asn Gln Asn Lys Glu Phe Met Phe Leu Ile Ser Phe Gln Asn Glu Gln
1 5 10 15
Val Leu Gln Glu Met
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<210> 105
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<400> 105

Ala Ala Gly Arg Gly Leu Gln Leu Leu Phe Tyr Ser Val Gly Ile Gly
1 5 10 15
Gln Ile Ser Ser Glu
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<210> 106
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<400> 106
Ala Ala Gly Arg Gly Leu Gln Leu Leu Phe Tyr Ser Ile Gly Ile Asp
1 5 10 15
Gln Ile Ser Ser Glu
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<210> 107
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Ala Asp Asp Ser Gly
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